

REMARKS/ARGUMENTS

Claim Rejections

Claims 6, 15, and 19 are rejected under 35 USC 112, first paragraph, as falling to comply with the enablement requirement. In addition, claims 6, 15, and 19 are
5 rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 4-10, 13, 15, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by KENJO (US 5,029,155).

10 Claims 2, 3, 11, 12, 14, and 16 are rejected under 35 U.S.C. 102(b) as being unpatentable over KENJO (US 5,029,155) in view of CALL (US 5,640,381).

Response:

Claim 1

The applicant asserts that the limitation “converting received monitor signal
15 values for a plurality of drive signal values to corresponding powers of the light emitting device according to a predetermined conversion rule” recited in claim 1 is not anticipated by KENJO. Rationale is given as below. Referring to the teachings of KENJO col. 5 lines 17-29, KENJO explicitly discloses:

*The output of the sample & hold circuit 27 is **converted** to a digital signal by an A/D
20 conversion circuit 30, and the resultant digital signal is then input to the calculation circuit 28. The calculation circuit 28 **compares the digital output** of the monitor circuit 22, which has been received through the A/D conversion circuit 30, **with the initially output power level directing value**. If there is **a difference between these two outputs**, the calculation circuit 28 **corrects the initial directing value** by **adding that**
25 **difference value to the directing value** so as to obtain a **directing value** which is an objective value for each sector. (emphasis added)*

That is, KENJO teaches converting the output of the sample & hold circuit (27) to a digital signal by an A/D conversion circuit 30 and using the calculation circuit (28) of KENJO to compare the digital signal with the initial directing value for
30 correcting the initial directing value, so as to obtain an objective directing value. In other words, KENJO discloses converting the output of the sample & hold circuit (27)

into a digital signal that is used to correct the initial directing value for obtaining an objective directing value. Therefore, the applicant emphasizes that KENJO merely discloses converting the output of the sample & hold circuit (27) into a **digital signal used to correct the initial directing value** for obtaining an objective directing value.

5 Provided that the digital output of the A/D conversion circuit 30 is interpreted by Examiner as a power level value corresponding to the laser diode, the applicant respectfully points out that calculating a difference between an initial **directing value** (i.e., the drive signal of the laser diode) and the **power level value** and then adding the calculated difference to the initial directing value to correct the initial directing value are illogical. Briefly summarized, the digital output generated from KENJO's
10 A/D conversion circuit 30 is by no means a power level value; otherwise, adding a difference between the A/D conversion output (power level value) and the initial directing value to the initial directing value would lead to an erroneous correction result of the initial directing value. Accordingly, the applicant contends that the
15 limitation "converting received monitor signal values for a plurality of drive signal values to **corresponding powers of the light emitting device** according to a predetermined conversion rule" recited in claim 1 is not anticipated by KENJO.

Further, in page 4 of the Office Action of May 05, 2008, Examiner asserts "calculation circuit 28 converts the output from the monitor circuit to an equivalent
20 drive signal value (see "directing value") and further teaches that each drive signal value corresponds to an **actual** power level (see Table 4; also see column 5:49-53 which implies that the input to the sample and hold circuit is converted into a value indicative of **actual** power level)". However, the applicant respectfully points out that as recited in claim 1, the received monitor signal values for a plurality of drive signal
25 values are converted to corresponding powers of the light emitting device according to a **predetermined** conversion rule but not the actual relationship therebetween. That is, the powers of the light emitting device is obtained from a predetermined relationship between the powers of the light emitting device and the monitor signal values, which is not actually detected as suggested by the Examiner. Related
30 description can be found in para. 20 of the application, stating "Fig.4 shows a graph illustrating a predetermined rule for converting monitor signal values to power values

by the microprocessor of Fig.2. At monitor signal MS at a value of A, there is zero power of the LD 210. For lower values of the monitor signal MS, the power increases according to the predetermined rule. The microprocessor 202 uses the predetermined rule shown in Fig.4 to convert the received monitor signal MS values corresponding to drive signal DS values being higher than the offset value DS0 to power values to thereby generate the preliminary power relationship". As cited above, the rule for converting monitor signal values to power values is **predetermined**. Accordingly, the applicant contends that the limitation "converting received monitor signal values for a plurality of drive signal values to corresponding powers of the light emitting device according to a **predetermined conversion rule**" recited in claim 1 is not anticipated by KENJO.

Since KENJO does not disclose "converting received monitor signal values for a plurality of drive signal values to corresponding powers of the light emitting device according to a predetermined conversion rule", the applicant contends that it is impossible for KENJO to anticipate "determining a preliminary power relationship relating values of the drive signal to powers of the light emitting device according to received monitor signal values for the plurality of drive signal values and the predetermined conversion rule. " recited in claim 1, and thus claim 1 should be found allowable over KENJO. The applicant asserts that claim 1 has overcome the rejection under 35 USC 102(b) and has been placed in condition for allowance. Withdrawal of the rejection to claim 1 is respectfully requested.

Claim 4

The applicant asserts that the limitation "writing test data to the optical medium of the optical device using a particular drive signal value for a predetermined power value according to the preliminary power relationship" recited in claim 4 is not anticipated by KENJO. Referring to the abstract of the teachings of KENJO, KENJO explicitly teaches:

*The calculation circuit 28 **determines whether** or not the power level actually detected when the laser is made to emit light at the power level represented by the above-described directing value data A, "11111000", is identical to an objective*

directing value. If it is, no updating of the directing value A in the directing table is carried out. If these two levels are different, the calculation circuit 28 adds the difference to the directing value A and thereby changes the directing value A in the directing table to a directing value A'. Subsequently, the laser is caused to emit light at a write power level represented by this directing value A'. FIG. 4 shows a case where the actually detected level represented by the directing value A is slightly lower than an objective value, and this directing value A is **corrected** to "11111011" in order to compensate for this difference.

As illustrated above, KENJO discloses determining whether the directing value data A is identical to an objective directing value or not and correcting the directing value data A to become the objective directing value if the directing values are not identical. That is, KENJO merely teaches to **determine** whether the directing value data A is identical to an objective directing value and to **correct** the directing value data A if necessary. Therefore, the applicant asserts that the claimed limitation "writing test data to the optical medium of the optical device using a particular drive signal value for a predetermined power value according to the preliminary power relationship" recited in claim 4 is not disclosed by KENJO. Claim 4 should be found allowable over the cited reference accordingly. In addition, claim 4 is dependent upon claim 1, and should be allowed if claim 1 is found allowable.

Claim 6

Regarding the claim rejections under 35 USC 112, first and second paragraphs, the applicant contends that a data area not originally dedicated to performing the OPC should be enabled for one person skilled in this art and it is not required to particularly point out and distinctly claim where this data area is located. Rationale is given as follows.

A person skilled in this art should readily appreciate that the so-called optimal power control (OPC) area is meant to be an area on an optical disc originally dedicated to performing the OPC process. For different conventional optical discs such as DVD+R and DVD-R discs, DVD-R and DVD-RW discs, or DVD+R and DVD+RW discs, it should be appreciated that the OPC areas located on the different

optical discs are different. Therefore, according to specifications of different optical discs, one skilled in the art should be able to understand which area of an optical disc is an OPC area according to the type of the optical disc. In other words, this person skilled in the art should also understand which area of the optical disc is not originally
5 dedicated to performing the OPC process. In addition, the term “OPC area” is commonly used in a variety of U.S. patents. For example, as evidenced by Lee (US 7,289,403) found by the applicant, the abstract and FIG. 1A of Lee’s disclosure clearly teach an OPC area for obtaining an optimal recording condition, without further defining which area of an optical disc the OPC area is actually located on.
10 Accordingly, the applicant asserts that one of ordinary skilled in the art would not require undue experimentation to make or use the invention, and it is also not required to particularly point out and distinctly claim which area of an optical disc the data area not originally dedicated to performing the OPC is located on. The applicant, therefore, believes that claim 6 has overcome the rejections under 35 USC 112, first
15 and second paragraphs.

Regarding the rejection under 35 USC 102(b), the applicant asserts that the limitations of claim 6 are not anticipated by KENJO. Rationale is given as below. Referring to the teachings of KENJO col. 4 lines 39-50, KENJO explicitly discloses:
*This sample & hold circuit 27 holds the output of the photodiode 5 (the monitor
20 circuit) in a recording mark portion RM when the diode laser 4 emits light at a write power level. The recording mark portion RM is a recording area set beforehand within a sector in which data is recorded at a write power level, as shown in FIG. 3a. The recording mark portion RM is provided following an ID portion where a sector number within a track is read out at a read power level and in advance of a data
25 portion where data is actually recorded (this recording mark portion RM may be provided at the beginning of each track).*

That is to say, KENJO merely teaches using the recording mark portion RM as a recording area, which is provided at **the beginning of each track**. However, upon careful review of KENJO’s disclosure, the applicant finds no description
30 pertinent to the OPC operation. Therefore, the applicant asserts that KENJO fails to teach or suggest that the beginning of each track is not originally dedicated to

performing the OPC, implicitly or explicitly. The limitations of claim 6 are not anticipated by the cited reference. Claim 6 should be found allowable over the cited reference accordingly. Moreover, claim 6 is dependent upon claim 1, and should be allowed if claim 1 is found allowable.

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Claims 10, 13, 15, and 19

In view of above arguments of claim 6, the applicant asserts that claims 15 and 19 have overcome the rejections under 35 USC 112, first and second paragraphs.

10 In addition, referring to above-mentioned arguments of claims 1, 4, and 6, the applicant believes that claims 10, 13, 15, and 19 also have been overcome the rejections under 35 USC 102(b) over KENJO, and have been placed in condition for allowance.

Claims 2, 3, 5, 7-9, 11, 12, 14, 16-18

15 Claims 2, 3, 5, and 7-9 are dependent upon claim 1, and should be allowed if claim 1 is found allowable. In addition, claims 11, 12, 14, and 16-18 are dependent upon claim 10, and should be allowed if claim 10 is found allowable.

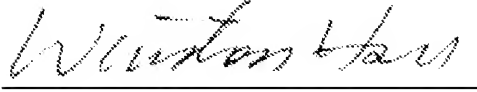
Conclusion

20 Based on the above remarks/arguments, the applicants respectfully submits that all of the rejections set forth in the Office Action dated 05/05/2008 have been overcome and the pending claims are in condition for allowance. Withdrawal of the rejections and reconsideration of the pending claims are respectfully requested. If a telephone conference would facilitate the prosecution of this application, the
25 Examiner is invited to contact the undersigned applicant's representative at the number indicated below.

30

Appl. No. 10/711,836
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Reply to Office action of May 05, 2008

Sincerely yours,



Date: 07/03/2008

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- 10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)